

Before the  
POSTAL REGULATORY COMMISSION  
Washington, DC 20268-0001

_____	)	
Mail Processing Network Rationalization	)	Docket No. N2012-1
Service Changes, 2012	)	
_____	)	

NATIONAL POSTAL MAIL HANDLERS UNION INTERROGATORIES TO USPS WITNESS  
EMILY R. ROSENBERG (NPMHU/USPS-T3-1-35)

Pursuant to Rule 26 of the Commission's Rules of Practice and Procedure, the National Postal Mail Handlers Union ("NPMHU") hereby submits the following interrogatories to USPS witness Emily R. Rosenberg. If necessary, please redirect any interrogatory to a more appropriate USPS witness.

**Instructions and Definitions**

"USPS" or "Postal Service" means the United States Postal Service, its employees, agents, witnesses, and all other persons who act under the direction of the United States Postal Service, including but not limited to consultants and other independent contractors.

"Mail Processing Network Rationalization Service Changes, 2012" or "MNPR" means the proposed restructuring of the USPS's mail distribution and transportation network presented to the PRC in its December 5, 2010 "Request of the United States Postal Service for an Advisory Opinion on Changes in the Nature of Postal Services."

“MNPR Network” means the mail distribution and transportation network required to implement the USPS’ MNPR and that, inter alia, accommodates the USPS’s elimination of 252 mail processing facilities.

“Documents” has the meaning as ascribed within the federal Rules of Civil Procedure and includes any documents or things that constitute or contain matters that are relevant to the subject matter of this proceeding and that are in the custody or control of the USPS.

“Losing facility” is defined and used herein in the same manner as it is defined and used in Section 1-1.2 of the PO-408 handbook.

“Gaining facility” is defined and used herein in the same manner as it is defined and used in Section 1-1.2 of the PO-408 handbook. The term document has the same meaning as ascribed within the federal Rules of Civil Procedure.

The term “person” means any natural person, corporation, partnership, proprietorship, association, organization or group of natural individuals.

The term “identify,” when used with regard to a person means to provide the full name, position, address and telephone number of the person.

The term “identify,” when used with regard to a document means to describe the subject matter of the document, its author, its date and any addressee.

## **INTERROGATORIES**

### **A. Step One – Scoring Tool**

NPMHU/USPS-T3-1                      Confirm that the Scoring Tool referenced in your testimony:

- (a) provided results based on geometric functions or simple feasibility calculations;
  - (b) did not provide optimized results;
  - (c) the Scoring Tool provided upwards of three million results as to feasible operating windows;
- and

(d) you reduced the initial list provided by the Scoring Tool to a list of twenty-five potential operating windows for consideration.

If not confirmed in all parts, please explain how this statement is incorrect.

NPMHU/USPS-T3-2                      Describe in detail the process by which the initial results from the Scoring Tool were pared down and ranked, and how the final operating window was selected; in particular, identify: (1) the names, titles, and areas of expertise for all individuals involved in the paring down/ranking/selection process; (2) which operational parameters were considered in the paring down/ranking/selection process; and (3) the stages at which cost was considered in the paring down/ranking/selection process and how cost was considered at that stage to rank/pare down/select from the results.

NPMHU/USPS-T3-3                      Describe in detail how you arrived at the top 25 operating window proposals in the scoring tool when the DPS “operating window was set at sixteen hours,” what factors were considered in paring the list to 25, and how you selected the final operating window from the “top 25.” (USPS-T-3, at 12.)

NPMHU/USPS-T3-4                      In Response to PR/USPS-T3-1(d) you state that the proposed utilization rate by tour “uses the same operational time as in the response to question [PR/USPS-T3-1]c and spreads that operational time over the reduced equipment set and reassigns the processing to the respective tour based on the Network Rationalization concept.” Please: (a) explain how you derived the numbers for the “reduced equipment set”; (b) explain what you mean by “reassigns the processing to the respective tour based on the Network Rationalization concept,” including in your answer what the “respective tour” is and how this affects your calculation; and (c) provide the calculations supporting this chart.

NPMHU/USPS-T3-5                      In Response to PR/USPS-T3-1(c) you provide a chart entitled “Utilization By Tour and Equipment Type” which states that it is sourced from EOR FY2010

data. Please explain the relationship of these calculations to the utilization percentages calculated by Witness Frank Neri in Response to PR/USPS-T4-1(b) in USPS-LR-44, Copy of LR-44(Neri).xls, Worksheet: "Summary," including in your answer whether you calculated utilization percentage in the same way as witness Neri by dividing the "Operating Time" by the "Window," where Operating Time is defined as the sum of the Idle Time, the the Run Time and the Down Time and, if not, why you used a different method of calculating utilization percentages,

## **B. Step Two – LogicNet Optimization Model**

NPMHU/USPS-T3-6                      Please provide the names, titles, and areas of expertise of all individuals who customized the LogicNet software in order to calculate Step Two's optimization model. In addition, provide all settings that were altered from their default state and how the decision was made to alter or not to alter that default setting.

NPMHU/USPS-T3-7                      Please refer to USPS-LR-15, 15\_LogicNet Model.xls, Worksheet: "OptimizationParameters."

- a. Please confirm that "Feasibility" defaults to a setting of "Low." If not confirmed, please explain and identify the individual who changed the setting to "Low."
- b. Please explain what "Feasibility" means within the context of this model and explain the impact, that a "Feasibility" setting of "Low" had on calculation of the LogicNet optimization model.

NPMHU/USPS-T3-8                      Please refer to USPS-LR-15, 15\_LogicNet Model.xls, Worksheet: "OptimizationParameters."

- a. Please confirm that “Feasibility Emphasis” defaults to a setting of “Balance between feasibility and optimality.” If not confirmed, please explain and identify the individual who changed the setting to “Balance between feasibility and optimality.”
- b. Please explain what “Feasibility Emphasis” means within the context of this model and explain the impact that a “Feasibility Emphasis” setting of “Balance between feasibility and optimality” had on calculation of the LogicNet optimization model.

NPMHU/USPS-T3-9                      Please refer to USPS-LR-15, 15\_LogicNet Model.xls, Worksheet: “OptimizationParameters.”

- a. Please confirm that “Apply Aggressive Scaling” defaults to a setting of “TRUE.” If not confirmed, please explain and identify the individual who changed the setting to “TRUE.”
- b. Please explain what “Apply Aggressive Scaling” means within the context of this model and explain the impact, if any, that a “Apply Aggressive Scaling” setting of “TRUE” had on calculation of the LogicNet optimization model.

NPMHU/USPS-T3-10                      Please confirm that the LogicNet optimization model mapped the distance from a 3-digit ZIP Code as originating from the geographic center of the ZIP Code, rather than the population centroid, facility location, or some other location. If not confirmed, please explain why this statement is incorrect.

NPMHU/USPS-T3-11                      Please describe in detail how the determination regarding what location should be used within a 3-digit ZIP code to calculate distance for the mapping of the optimization model was made, including in your answer the individual(s) that made this decision, and what factors were considered in making this determination. .

NPMHU/USPS-T3-12                      On page 18 of your testimony you state that “The total workload was divided by equipment throughput and operating window.” In addition, on page 19 of your

testimony you provide Figure 1: Model Equipment Throughput. Please describe in detail the statistics and calculations on which you relied in reaching these figures.

NPMHU/USPS-T3-13            Please confirm that the throughput numbers you used in the optimization model were national averages that did not consider site-to-site variations in productivity. If not confirmed, please explain why this statement is incorrect.

NPMHU/USPS-T3-14            In Response to PR/USPS-T3-1(b) you provide a chart—  
“Maximum Throughput By Tour and Equipment Type with 3 Minutes Idle Time per Hour.”  
Please confirm that this chart and Figure 1 on page 19 of your testimony are based on the same statistics, calculations, and data. If not confirmed, please explain.

NPMHU/USPS-T3-15            Please refer to USPS-LR-34, LR\_78402.USPS.34.xls, Worksheet:  
“USPS Modeling Facility List.”

- a. Please confirm that approximately 327 sites, as indicated in Column H, are not “MODS sites,” such that the model did not have MODS data for these sites in calculating the LogicNet optimization model. If not confirmed, please explain.
- b. Please describe in detail the process by which the model incorporated these sites in the absence of 2010 MODS data and how the absence of MODS data affected the calculation of the LogicNet optimization model.
- c. Please confirm that all 327 sites indicated in Column H as missing MODS data are small sites, as defined in footnote 18 of your testimony as sites with a square footage from 0 to 210,000 square feet. If not confirmed, please explain.

NPMHU/USPS-T3-16            Please refer to USPS-LR-34, LR\_78402.USPS.34.xls, Worksheet:  
“USPS Modeling Facility List.”

- a. Please confirm that approximately 368 sites, as indicated in Column I, are not “eMARS sites,” such that the model did not have eMARS data for these sites in calculating the LogicNet optimization model. If not confirmed, please explain.
- b. Please describe in detail the process by which the model incorporated these sites in the absence of eMARS data and how the absence of these data affected the calculation of the LogicNet optimization model.
- c. Please confirm that all 368 sites indicated in Column I as missing eMARS data are small sites as defined in footnote 18 of your testimony as sites with a square footage from 0 to 210,000 square feet. If not confirmed, please explain.

NPMHU/USPS-T3-17                      Please refer to USPS-LR-34, LR\_78402.USPS.34.xls, Worksheet: “USPS Modeling Facility List.” On page 17 of your testimony you state that “The Logic Net optimization model activated 177 processing facilities—168 with flat processing operations, 163 with letter sorting operations, and 152 with package and bundle sorting operations.”

- a. Please confirm that these 177 facilities correspond to the approximately 198 facilities demarcated with a “Y” in Column F “Model Opens” in USPS-LR-34.
- b. If confirmed, please explain the discrepancy between these two figures.
- c. If not confirmed, please explain.

NPMHU/USPS-T3-18                      In the 2006 iteration of the proposal to reduce postal sites, the Postal Service utilized a simulation model to test the feasibility of its optimization model.

Please:

- a. Confirm that a simulation was not used to test the feasibility of either the network model developed by the LogicNet software, or the proposed redesigned network that resulted from your process after consultation with postal management;

- b. Explain in detail whether a simulation model was considered to test feasibility of the optimization model in this instance, including by identifying the individual(s) who made the determination and the reasons for the determination; and
- c. If a simulation model was not considered, please explain why it was not.

NPMHU/USPS-T3-19            Please explain how the LogicNet network optimization model considered any other characteristics of each plant other than square footage in calculating site-specific capacity and feasibility of projected site-specific capacity—e.g., the length of the building, number of docking ports, total square footage of dock space, the number of 53' trucks that can be docked at any one time, and the number of access roads to the facility's docking space. If other characteristics were not considered, please provide the name and title of the individual who made this determination and why they made the decision to not consider these factors in creating the optimization model. Additionally, please provide an explanation as to how exclusion of these factors could have affected the model and please detail any steps taken during the modeling process to mitigate these effects.

NPMHU/USPS-T3-20            Identify all factors by which the LogicNet optimization model incorporated the cost of increased risk and uncertainty into its calculations—e.g., risk of delay or disruption inevitable with greater travel distance, risk of mechanical failure based on increased productivity stress on the equipment and vehicles, etc. If the LogicNet model did not consider increased risk, please identify the individual who made this determination and explain why these risks were not considered.

NPMHU/USPS-T3-21            Describe why you choose the figure 200 miles in setting the parameters for the optimization (i.e., "each 3-digit ZIP Code workload could be transported up to 200 miles to be processed by a plant.") (USPS-T-3, at 13.)

NPMHU/USPS-T3-22            Describe the basis for the assumption in your model that inflating the Handbook AS-504, *Space Requirements* by an additional twenty percent square footage would “ensure there was adequate staging room under this new concept when all volume is available at the start of the windows.” (USPS-T-3, at 18.) Describe in detail all statistics and calculations on which you relied in reaching the conclusion that twenty percent inflation was sufficient to provide adequate staging room.

NPMHU/USPS-T3-23            Please confirm that the LogicNet optimization model calculated site capacity based simply on total square footage and did not round down capacity in order to exclude calculations of partial equipment. If not confirmed, please explain why this is incorrect. If confirmed, please describe in detail the process by which all sites that were activated based on site capacity calculation that included partial equipment were adjusted in the model. If these sites were not adjusted or only some sites were adjusted, please explain.

NPMHU/USPS-T3-24            Referring to your discussion of opening costs used in the optimization model:

- a. Please confirm that the opening costs for each facility, as described in your testimony at note 17 and defined as the rental cost for leased facilities or a calculated opportunity cost for an owned building, is the same calculation as was used by witness Smith to calculate the savings resulting from closing down facilities that were not included in your redesigned network, see USPS-T-9 at page 21.
- b. If ((a) is not confirmed, please explain the difference between the calculations and why different calculations were used;
- c. Explain whether the LogicNet least-cost optimization model accounted for the fact that the Postal Service will not be able to sell or terminate the lease for some large

percentage of buildings identified for closure, as explained in the testimony of witness Smith at page 20.

NPMHU/USPS-T3-25            In footnote 18 of your testimony you state that “[t]hree groups were formed: (1) Buildings with square feet from 0 to 210,000, (2) Buildings with square feet from 210k to 450k, and (3) Buildings with square feet from 450K to 750K.” The model then considered the slope of the polynomial function separately for each group to calculate cost per piece based on actual workload processed at each facility. Please describe in detail: (a) why three different groups were considered in the calculation of cost per piece; (b) identify the individual who made the determination that square footage was the ideal basis on which to differentiate these three groups and calculate cost per piece accurately; and (c) describe in detail all statistics and assumptions on which you relied in determining that group one should encompass buildings with a square footage of 0 to 210,000, group two should encompass buildings with a square footage of 210K to 450K, and group three should encompass buildings with a square footage of 450K to 750K.

NPMHU/USPS-T3-26            Please confirm that the “cost per piece based on workload processed at the facility” calculation on pages 14-15 of your testimony, and described in depth in footnote 18, draws from the same cost data set as that utilized to determine “institutional cost” and “volume variable cost” by Witness Bradley (USPS-T-10) in his testimony on pages 1-10. If not confirmed, please explain why each witness found it necessary to draw on a separate data set to calculate costs per site.

### **C. Step Three- Local Input & Model Revision**

NPMHU/USPS-T3-27            Describe in detail all changes made to the network design arrived at by the LogicNet least-cost optimization model during the local input and model revision step

of your process, including information for each facility added or removed from the consolidation list at this stage, what that facility was added or removed.

NPMHU/USPS-T3-28            Identify all individuals and their areas of expertise who were consulted with during Step Three “Local Input,” and explain the selection process by which individuals were selected to provide local input.

NPMHU/USPS-T3-29            Confirm that none of the constraints considered by the LogicNet optimization model were used to constrain modifications to the model in Step Three “Local Input.” If not confirmed, explain why this is wrong.

NPMHU/USPS-T3-30            Identify any efforts made in Step Three “Local Input” in order to compensate for effects that changes to the portions of the model based on local input might have on related aspects of the optimized model—e.g., mitigate the impact that deactivating a site that the model had activated would have on nearby site or 3-digit ZIP Codes that previously relied on the activated site.

#### **D. Step Four – Deeper Dive Tools**

NPMHU/USPS-T3-31            Please confirm that no sites were added or removed from the model during Step Four as compared with the network developed during Step 3 of your process. If not confirmed, please describe all changes that were made to the model, identify the individual who made that change, and describe in detail how the determination to alter the model was made.

NPMHU/USPS-T3-32            On page 21 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[a]fter the expert feedback was incorporated, the resulting 3-digit ZIP Code assignments were used to conduct site-specific analyses that included origin mail arrival profiles, as well as lunch and break factors, to generate

actionable equipment sets as a starting point for discussion.” Please confirm that a site-specific analysis was completed for all 3-digit Zip Code assignments considered by the LogicNet optimization model. If not confirmed, please explain. In addition, please provide a Library Reference of all sites at which a site-specific analysis was conducted and the results of that site-specific analysis.

NPMHU/USPS-T3-33            On page 23 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[t]he throughput used for the AFCS is 22,500 pieces per hour which factors in lunch and breaks” and that “[t]he throughput used for the outgoing primary on the DBCS is 23,200 pieces per hour which included lunch and break factor.” In addition, on page 25 of your testimony, you state that “[t]he DPS first pass throughput was 27,500 pieces per hour and the DPS second pass throughput was 30,000 pieces per hour.” Please describe the calculations on which you relied in reaching the AFCS, DBCS, and DPS throughput assumptions. In addition, please explain any difference in throughput assumptions between the Stage 4 assumptions as described above and the throughput assumption used for that particular piece of equipment by the LogicNet model as described in Figure 1 on page 19 of your testimony.

NPMHU/USPS-T3-34            On page 30 of your testimony, in regard to the “Equipment Determination” calculation in Stage Four, you state that “[o]utgoing VAP was based on a hub collection concept.” Please confirm that this is the same hub concept as was described on page 8 of your testimony in regard to the Scoring Tool. If not confirmed, please explain and describe in detail any assumptions or calculations on which the “hub collection concept” was based.

## **E. Overall**

NPMHU/USPS-T3-35            On page 14 of your testimony, you state that “[n]o capital investments were allowed in the model in light of the Postal Service’s current cash flow

situation.” (USPS-T-3, at 14.) Confirm that this statement applies to all stages of modeling and is not specific to the Step Two LogicNet network optimization model. If not confirmed, please explain how this is incorrect.

NPMHU/USPS-T3-36            On page 34 of your testimony you state that “[f]or the proposed activated nodes, the network will require the following equipment: 617 AFCS; 2,995 DBCS (including DIOSS); 522 AFSM100; 100 FSS (9 currently at NDC); 205 SPBS/APBS (22 at NDC/ISC); and 74 APPS (12 at the NDCs). Please provide a Library Reference to support this statement, including all equipment required for the proposed activated nodes; of that equipment, which equipment will need to be moved from its current facility; the facility to which the equipment will need to be moved; the distance between point of origin and destination facility; and a list of all equipment that will need to be disposed of in order to implement the final proposed model.

Respectfully submitted,

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